How Curiosity Attracts Participation in Volunteer-Based Online Experiments

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Abstract

In the past four years, LabintheWild, a volunteer-based online experiment platform that offers social comparison feedback, has engaged approximately 3.5 million participants [6]. The most promising explanation for LabintheWild's success has been the volunteers' curiosity to learn about themselves and compare themselves with others [3]. We plan to further understand and design LabintheWild to be curiosity-centered so that it (1) attracts a large and diverse population and (2) provides meaningful learning opportunities for volunteers.

Author Keywords
Curiosity; Social Comparison; Online Experiment Platforms

Curiosity on LabintheWild
We believe that curiosity is the best way to attract and incentivize participants in large-scale uncompensated online experiments. The fascination with one's similarities and differences to others is powerful and innately human. Social comparison theory claims that people have an intrinsic drive to self-evaluate their opinions and beliefs by comparing themselves to others [2]. There is evidence for curiosity being, besides self-enhancement, a driving factor for social comparison [1].

Social comparison seems to be a major determiner for participant behavior on Labinthewild. In our prior work, we

found that many LabintheWild participants come to the site because they are curious to learn about themselves and to compare themselves to others [6]. We also showed that participants' performance on a test affected their sharing of the test result via social media [3]. In addition, our work suggests that participants have a desire to be in dialogue with researchers and take advantage of more learning opportunities [5]. The LabintheWild online tests act as catalysts to intrigue, pique volunteers' interests to become more involved and contribute to the research goals beyond what is currently facilitated by the platform. Indeed, based on participants' comments, which in themselves are manifestations of their eagerness to share and learn, the authors have identified citizen science opportunities for large scale online experiment platforms. These showings all open up the question of what role curiosity plays on LabintheWild and how we could leverage curiosity mechanisms to design better online behavior experiment platforms.

Research Agenda

What is the influence of curiosity on participant behavior on LabintheWild? Information gap theory has previously been shown to be a powerful mechanism to improve worker performance on Amazon Mechanical Turk [4]. We would like to experiment with such mechanisms to trigger curiosity on LabintheWild.

How can we design online experiments to encourage and facilitate volunteers' curiosity? One direction that excites us most is incorporating citizen science opportunities on the platform. Because LabintheWild attracts participants from more than 200 countries and offers tests in nine languages, there are important questions around what global citizen science could look like and mean when collaborators do not share local or cultural landscapes but rather are bonded by their curiosity.

Biography

Eunice Jun and Bernd Huber are currently working toward Ph.D. degrees in computer science at the University of Washington (advised by Katharina Reinecke) and Harvard University (advised by Krzysztof Gajos), respectively. Together, the authors work on enhancing the design of LabintheWild.

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